ABSTRACT

METHOD TO CONTROL THE SUPPLY POWER BEING PROVIDED TO A POWER AMPLIFIER

When a power amplifier operates near or in saturation, the quality of the output signal can be degraded and an over current condition can occur. To prevent this, the level of the power supply voltage being provided to the power amplifier must be monitored and controlled. One technique is to provide the supply power to the power amplifier through a pass transistor. By characterizing the resistance of the pass transistor and sensing the voltage drop across the pass transistor, the current being provided to the power amplifier can be determined. If this current is too high, the control input to the pass transistor can be adjusted to limit the current.